

CCA GCA AGC ACT GAT GCC TGT T-TAMRA-3' CA GCA AGC ACT GAT GCC TGT T-TAMRA-3'

CA GCA ACC AAT GAT GCC CGT T-TAMRA-3'

Fig. 1A

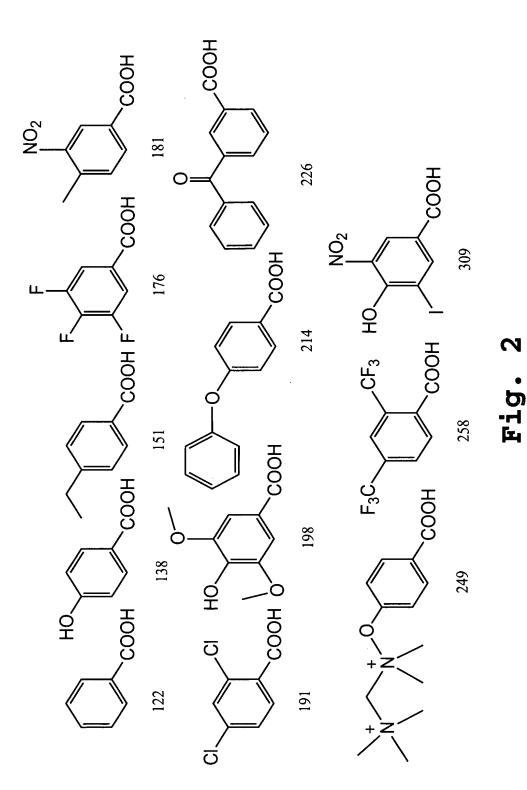
Fluorescent Dyes

	Absorbance Maxima	Emission Maxima
Fluorescein	494nm	525nm
Tetrachloro fluorescein	521nm	536nm
TAMRA	565nm	580nm

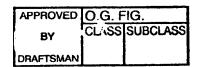
Fig. 1B

Cleaved Fragments:

Fig. 10



cospigns output



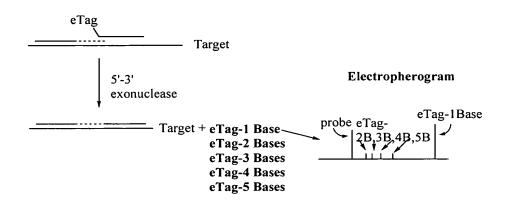


Fig. 3A

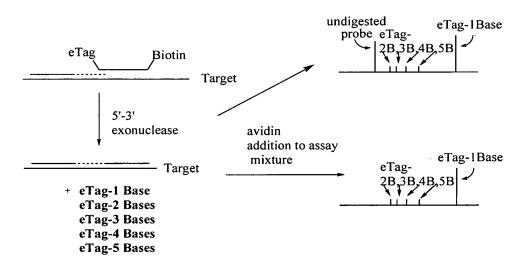


Fig. 3B

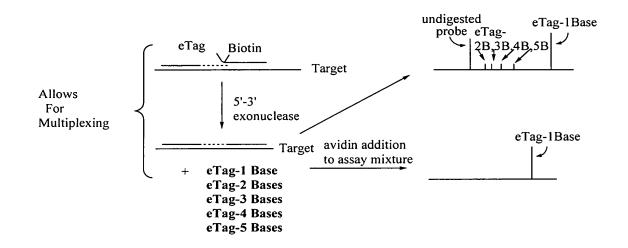


Fig. 3C

Fig. 3D

he had and the second of the s

ľ

Fig. 4

APPROVED	O.G. FIG.		
BY	CLASS SUBCLASS		
DRAFTSMAN			

e-tag Reporter	Elution Time on CE, min	<u>Mass</u>
COOH OHO OHO OHO OHO OHO OHO OHO OHO OHO	6.4	778
CI COOH NH	² I 7.1	925
CI CI CI ON	7.3	901
CI CI CI O-P-O OH NH2 HN CI CI O-P-O OH NH2 HO O O O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O-O	7.7	994
CI COOH OHO OHO OHO OHO OHO OHO OHO	8.0	985
HO O O OH	9.25	961

Fig. 5

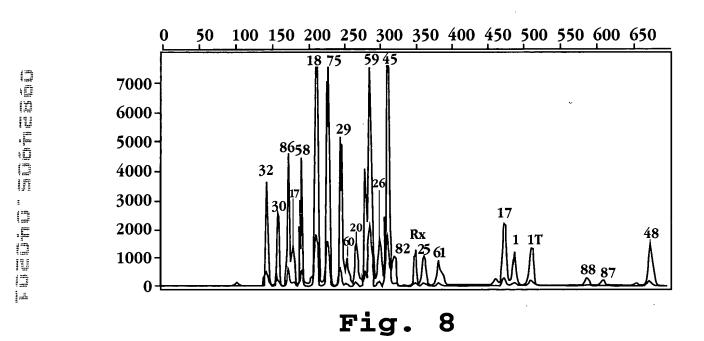
DRAFTSMAN

e-tag Reporter	Charge	Elution Time, min
O Fluorescein		
HN () O-P-C ₃ C ₃ C ₃ C ₃ C ₃ -	-8	12.1*
OF Fluorescein HN() OF O-P-O-C ₆ C ₆ C ₆ C ₆ C OF Fluorescein	C ₆ C ₆ —√ -9	12.7
OST INDICACCITI		
HN () 0-P-0-C ₆ C ₆ C ₆ C ₆ C	C ₆ — dC -8	12.8
Fluorescein O	-7	13.1
Fluorescein OP-O-C ₃ C ₃ C ₉ —	-6	13.0
HN() O-P-O-C ₆ C ₆ C ₆	-6	13.4
OFFluorescein HN OFFluorescein HN OFFluorescein HN OFFluorescein HN OFF OFF OFF OFF OFF OFF OFF	dC -5	12.8*
O Fluorescein	-5	13.2*
O Fluorescein	-3 C	13.2
O Fluorescein HN () O -P -O - C ₉ C ₉ O Fluorescein	- 5	14.8
HN () 0-P-0-TTTdC 5 0-	-6	17.3
HN () O-P-O-TTdC	-5	17.0
HN (O-P-O-TTdC	-4	15.2*
OFFluorescein OFF-O-TdC	-4	16.5

Fig. 6

Fig. 7

APPROVED O.G. FIG.		
BY	CLASS SUBCLASS	
DRAFTSMAN		



ROOC COOR N
OCE

$$X = \text{halogen}$$

HOOC
 $X = \text{halogen}$
 $X = \text{halogen}$
 $X = \text{halogen}$

Fig. 9

(9 negative charges per coupling)

Fig. 10

HOCCOPH Pyridine HOCCOPH DCC,
$$CH_2Cl_2$$

Hoccoph Portion DCC, CH_2Cl_2

Hoccoph DCC, CH_2Cl_2

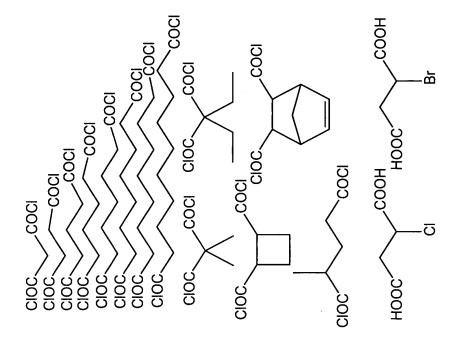
For an indication DCC, CH_2Cl_2

Fig. 11

Fig. 12

$$\begin{array}{c} \text{HO} \\ \text{O} \\ \text{O} \\ \text{H}_2\text{O} \\ \text{$$

Fig. 13



H₂N OH H₃N OH H₂N OH H₂N OH H₃N OH H₄N OH OH H₄N OH H₄N OH H₄N OH H OH H₄N OH H₄N OH H₄N OH H OH H₄N OH H₄N OH H₄N OH H₄N OH H₄N OH H OH H₄N OH H OH H₄N OH H OH H H₄N OH H H₄N OH H H₄N OH H H H H H₄N

COOH **10**

Fig.

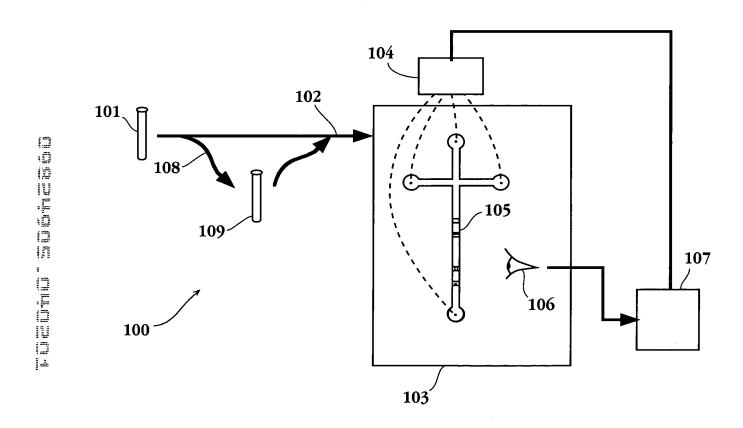
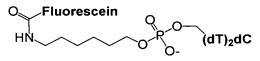


Fig. 16

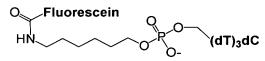
ACLA001

ACLA002

ACLA003



ACLA004



ACLA005

ACLA006

ACLA007

ACLA008

ACLA009

ACLA010

ACLA011

ACLA012

Fig. 17A

Fig. 17B

Fig. 17C

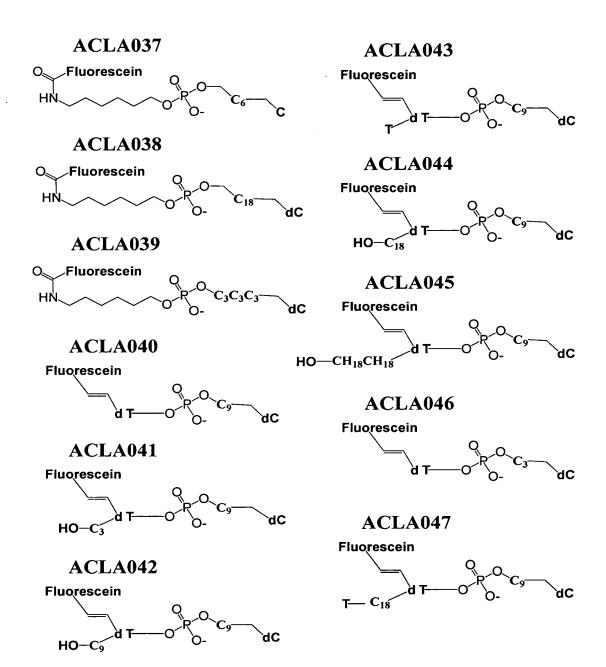


Fig. 17D

ACLA048 Fluorescein ACLA054 Fluorescein ΗŇ ACLA055 ACLA049 Fluorescein Fluorescein ACLA056 ACLA050 Fluorescein Fluorescein ACLA057 ACLA051 Fluorescein Fluorescein ACLA058 ACLA052 Fluorescein Fluorescein ΗŃ ACLA059 ACLA053 Fluorescein Fluorescein ΗŃ

Fig. 17E

Fig. 17F

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

Fig. 17G

Fig. 17H

APPROVED O.G. FIG.		
BY	CLASS SUBCLASS	
DRAFTSMAN		

ACLA089

$$C_3C_3TC_3$$
 d T—O O O do

ACLA090

$$C_3C_3C_3TC_3$$
 d T—O C_9 —dC

ACLA091

Fluorescein

ACLA092

Fluorescein

ACLA093

Fluorescein

ACLA094

ďC

ďC

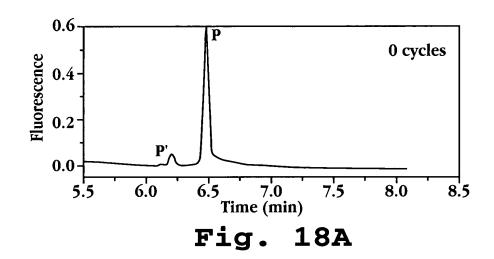
ACLA095

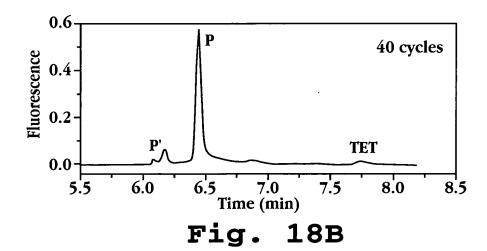
ACLA096

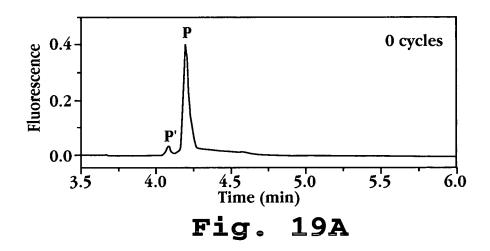
ACLA097

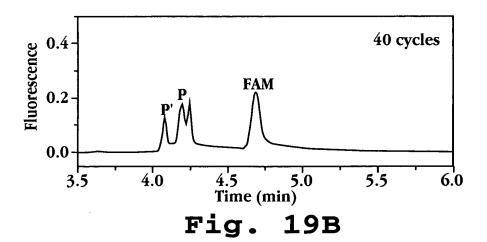
Fig. 17I

Fig. 17J



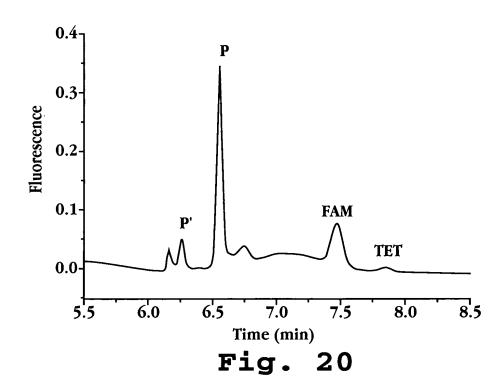






	O.G. FIG.		
BY	CLASS SUBCLASS		
DRAFTSMAN		i i	







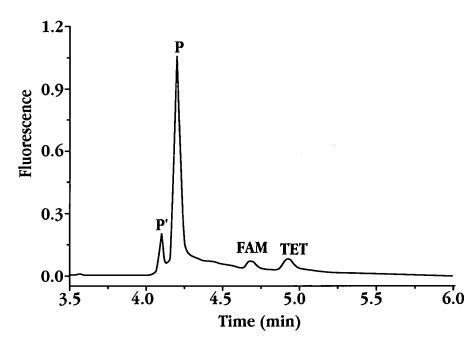


Fig. 21

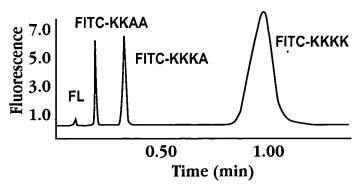


Fig. 22



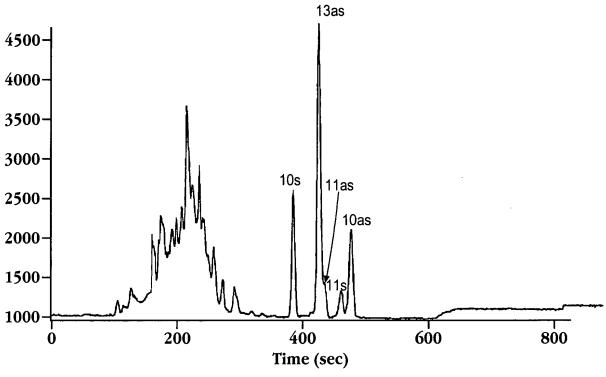


Fig. 23A

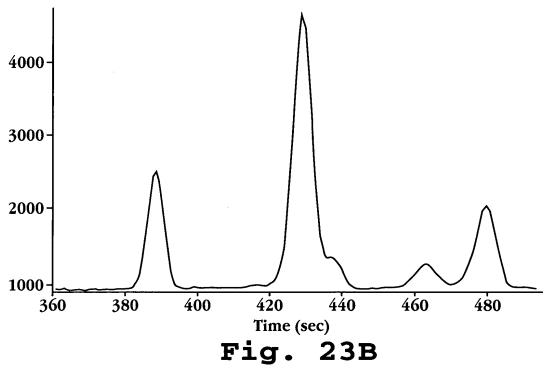


Fig.

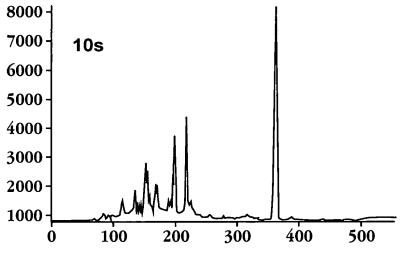
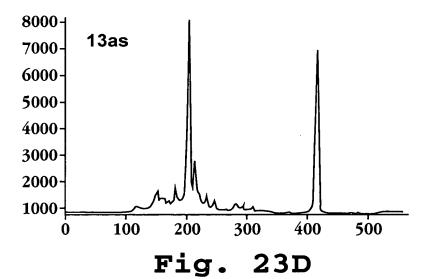


Fig. 23C



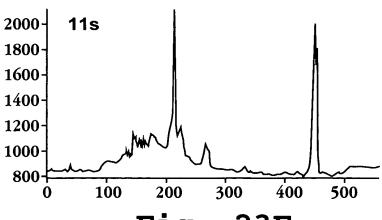


Fig. 23E

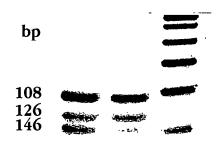
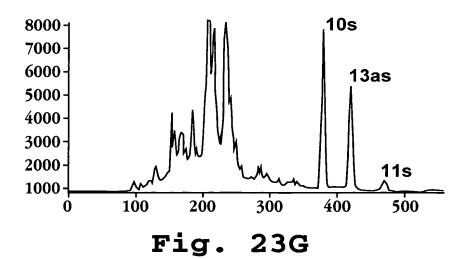


Fig. 23F





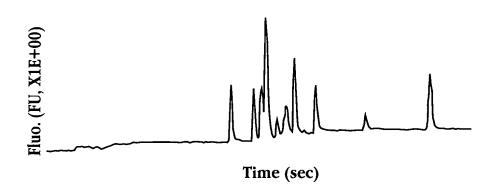


Fig. 24

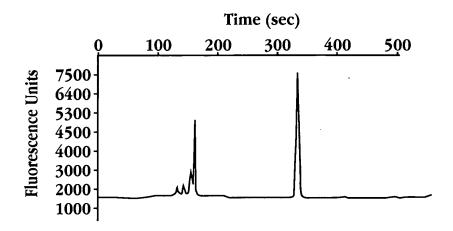


Fig. 25A

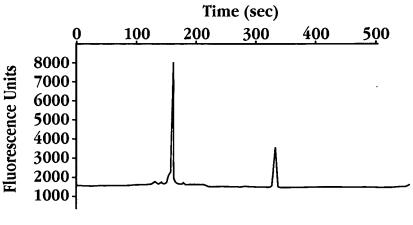


Fig. 25B

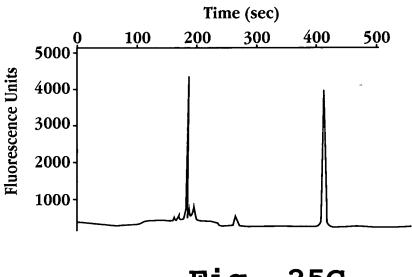


Fig. 25C

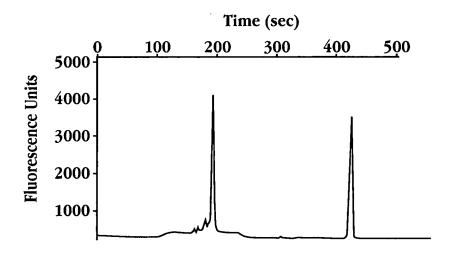


Fig. 25D

APPROVED	D O.G. FIG.		
BY	CLASS SUBCLASS		
DRAFTSMAN			

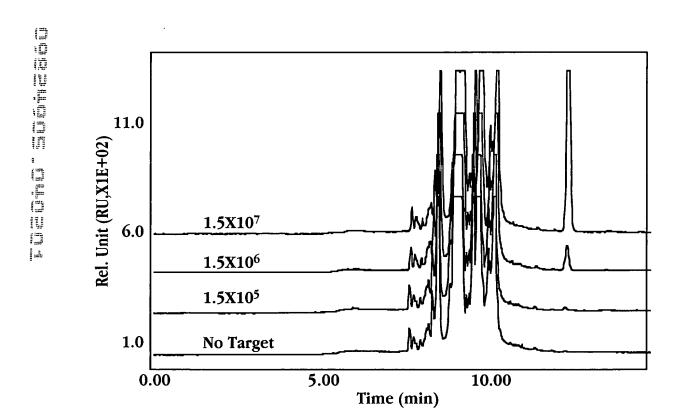
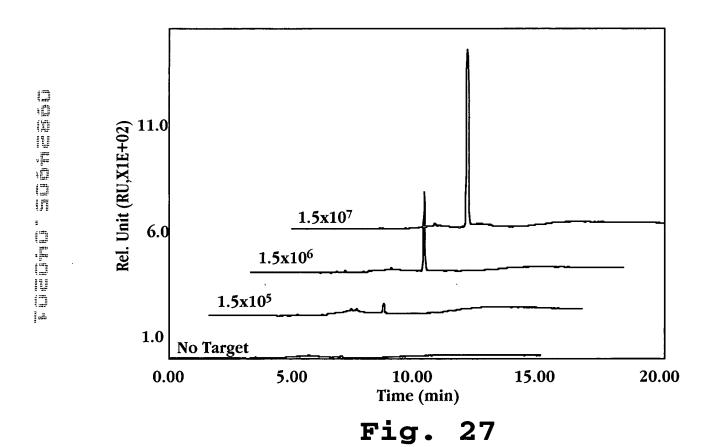


Fig. 26

APPROVED	O.G. FIG.		
BY	CLASS SUBCLASS		
DRAFTSMAN			





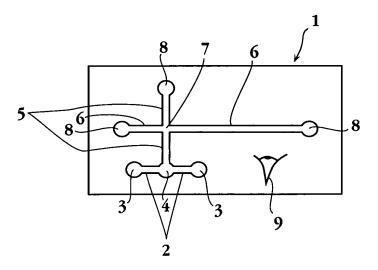


Fig. 28A

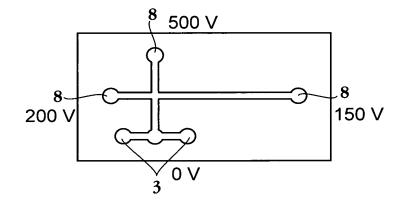


Fig. 28B

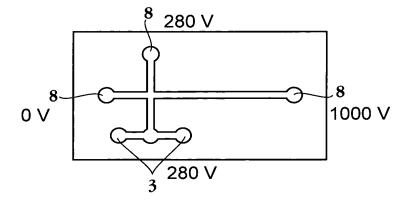


Fig. 28C

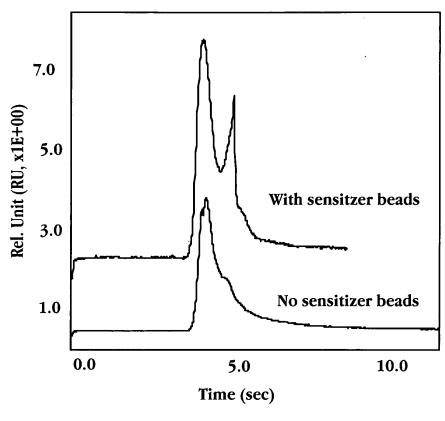


Fig. 29

APPROVED O.G. FIG.		
BY	CLASS SUBCLASS	
DRAFTSMAN		

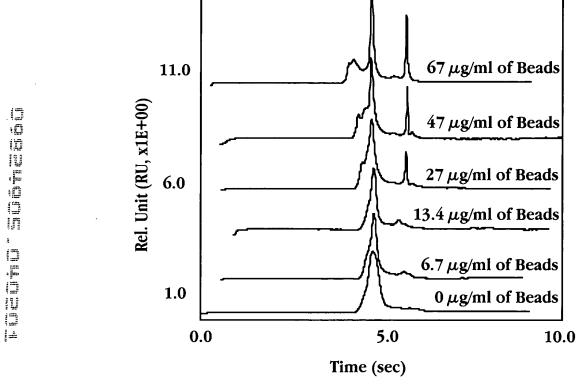
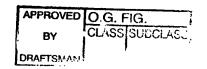


Fig. 30



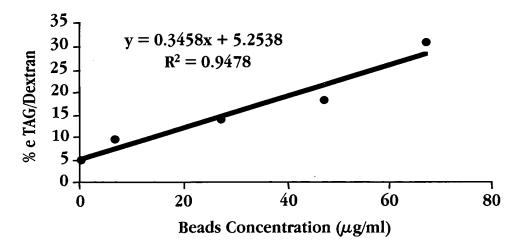


Fig. 31

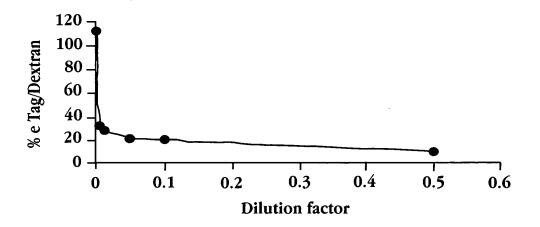


Fig. 32

t-BDMSiO t-BDMSOi DMTO. t-BDMSiO t-BDMSOi. NCCH2CH2OP(CI)N(iPr)2 TOSELLE CILLET Tetrazole t-BDMSOi $(Bu)_4N^+F^-$ DMT-CI 5 O-V-N-O 1- TMSiCl/Pyridine t-BDMSOi t-BDMSiC t-BDMSi-Cl Imidazole/DMF

Fig. 33

34
ig.
<u>년</u>

H ₂ N 0 0 0 N N N N N Si-Ci DMTO	t-BDMSiO 1- O HN NH NHS NHS	2-(Bu) ₄ NF WHBz	DMTO OHO	e
NHBz H ₂ N~^(N H ₂ N ~0~0~0~0 NH ₂	ø	NH O	NCCH ₂ CH ₂ OP(C!)N(iPr) ₂
1. Br ₂ /NaOAc Buffer/ pH5 2. TMS-Cl/ BzCl	3- DMT-Cl/ pyridine DMTO O OH	NHBz	DMTO O O O O O O O O O O O O O O O O O O	
N_{H_2} 1.	dA dRb		SH O HN O	4

In the tend to the tend of the tend of
